Washington Aqueduct
Capital Improvements
FY 2000-2005

Project Titles

121 Basin Waste Recovery

Environmental Assessment for Solids Disposal Issue

Provides for additional NEPA documentation and studies to address the solids disposal issue and comply with EPA permit requirements. EA process will help shape decision on the disposal issue.

122 Dalecarlia Pumping Station

Pump, Valve and Piping Improvements

Replacement and rehabilitation of pumps, valves and appurtenant piping within the Pumping Station to insure reliability of pumping operations to first, second and third high service areas and the Northern Virginia customers.

SCADA Upgrade

Replace existing system with a new supervisory control and data acquisition system controlled from the Dalecarlia Chemical Building.

HVAC Improvements

Upgrade and replacement air handling units and modification of duct system to provide efficient cooling within building.

Roof Repairs

Replacement of slate roof over the center of the Pumping Station.

126 McMillan WTP Improvements

Silt Curtin Replacement

Replacement of existing silt curtin to insure separation of backwash water solids from settled water flowing through the McMillan Reservoir in order to maintain low turbidity levels at the plant intake structure.

East Shaft Pumping Station Renovation

Building renovation including lead abatement, window replacement, ceiling replacement, lighting improvements and painting.

Chemical Building Process Improvements

Upgrades to chemical storage and feed systems to improve plant reliability and meet EPA requirements.

Annex 1 Building Renovation

Upgrades and replacements of existing electrical power and control systems within building and general building renovations.

Clearwell Repairs

Structural repairs to roof and wall system of the North Clearwell.

Roadway Improvements

Roadway and parking lot repaving for plant facilities.

HVAC Improvements

Replacement of heating and air condition equipment including chillers, air handling units and boiler.

Security Improvements

Provide increased security for the McMillan Water Treatment Plant by adding intrusion alarms, TV monitors, etc.

Instrumentation Improvements

Upgrading of water quality instrumentation to meet EPA standards and effectively control the treatment process.

Pumping Station Improvements

Upgrading and replacement of Pumping Station equipment including pumps, motors and control systems.

Roof Replacements

Replacement of McMillan Filter and Chemical Building roof.

Maintenance, Flume and Gatehouse Improvements

General renovation of three buildings including structural repairs, roof replacements and architectural improvements.

127 Appurtenant Transmission and Storage Facilities

By-Conduit Rehabilitation

Installation of reinforced shotcrete lining to repair cracks and structural defects within raw water conduit located between Intake Screen Building and the South Connection Intake Building.

Georgetown Reservoir Improvements

Replacement of damaged concrete slope protection and bottom slabs within Basin No. 1 and 2. Repair and renovation of influent gatehouse.

Forebay and Spoil Area Improvements

Construct concrete bottom slab and appurtenant drainage structures in spoil area to provide hard surface to excavate dredge spoil from area.

Rock Creek Blow-Off Improvement

Replacement of existing non-functional blow-off valves required to drain City Tunnel.

Transmission Main Improvements

Upgrading and replacement of transmission mains on the first, second and third high service areas including pipes, valves and vaults.

Hydro Building and Champlain Street Building Renovation

Renovation of buildings include lead abatement, window and door replacement, roof replacement and lighting improvements.

Little Falls Pumping Station Electrical Renovation

Upgrading and replacement of electrical switchgear and controls.

Conduit Repairs

Installation of shotcrete lining and repointing of masonry joints within brick raw water conduit to prevent leakage and maintain structural integrity.

Finished Water Reservoir Sealing

Perform crack repair and grouting to minimize leakage in the underground reservoirs.

Reservoir Flood Control Improvements

Clear and widen flood control channel around reservoir to prevent pollution of reservoir during floods.

Booster Pumping Station Renovation

Renovation and upgrading of structure including lead abatement, painting, roof replacement and electrical improvements.

128 Dalecarlia WTP Improvements

Chemical Building Process Improvements

Upgrades to chemical storage and feed systems to improve plant reliability and meet EPA requirements.

Administrative Building Improvements

Asbestos abatement in Boiler Room and the installation of replacement windows.

Chemical Building HVAC Improvement

Replacement of air handling units and fan coils.

Maintenance Building HVAC Improvements

Replacement of air handling units and modifications to duct system.

East Filter Building Renovation - Phase II

Replacement of roof system and installation of architectural finish system within building.

Roadway Improvements

Roadway and parking lot repaving for plant facilities.

Electrical Renovations

Replacement of electrical ducts, cables and substations.

Security Improvements

Provide increased security for the Dalecarlia and Little Falls facilities by adding intrusion alarms, TV monitors, etc.

Floc/Sed Basin Improvements

Replace and/or repair flocculators and drive equipment.

Instrumentation Improvements

Upgrading of water quality instrumentation to meet EPA standards and effective control the treatment process.

Washwater Tank Improvements

Perform lead abatement, painting and structural repairs to elevated tank and clean sediment out of underground tank.

West Filter Building Improvements

Upgrade filter media, backwash system and controls.

Renovation of Old Pumping Station

Perform structural repairs and add HVAC system. Create a visitors' center as the focal point for plant tours and citizens outreach.

Chemical Building Laboratory Renovation

General renovation of laboratory space including the replacement of casework and upgrades to lab equipment.

130 Process Testing and Studies

An investigation of various water treatment processes to determine most feasible engineering solutions to meet EPA requirements.